

Remarks

Claims 1-3, 5-8 and 10-14 will pending in this application following entry of this amendment. Claims 4, 9 and 15 have been cancelled without prejudice. No new matter has been added.

Independent claim 1 has been amended to include additional elements of shock wave generating apparatus including piezoelectric fibers between respective electrical terminals, a coupling membrane and a shock wave propagation medium. Support for this amendment is provided at least at FIGS. 1-3 and paragraphs [0051], [0054], [0059], [0063] and [0064] of the published specification.

Support for the amendment of dependent claim 2 is at least provided at FIGS. 1-3 and paragraphs [0016] and [0055].

Support for the amendment of dependent claim 3 is at least provided at FIGS. 1-3 and paragraphs [0057] and [0059].

Support for the amendment of dependent claim 5 is at least provided at paragraph [0058].

Support for the amendment of dependent claim 6 is at least provided at FIGS. 1-3 and paragraphs [0026], [0057] and [0060].

Support for the amendment of dependent claim 7 is at least provided at paragraphs [0023] and [0063].

Support for the amendment of dependent claim 8 is at least provided at paragraphs [0023] and [0063].

Support for the amendment of dependent claim 10 is at least provided at paragraph [0028], [0029], [0057] and [0062].

Support for the amendment of dependent claim 11 is at least provided at FIGS. 1-3 and paragraphs [0059].

Support for the amendment of dependent claim 12 is at least provided at paragraph [0058].

Support for the amendment of dependent claim 14 is at least provided at paragraph [0059].

Applicant traverses the Examiner's refusal to enter the Information Disclosure Statement (IDS) filed March 12, 2008. All of the cited references included in the IDS are in the English language or provided with an English-language equivalent of the non-English reference so that no concise explanation is required under 37 CFR 1.56(c). *See MPEP §609.*

Applicant has amended the specification as required by the Examiner. The Examiner's indication that the listing of "part numbers" or "List of Reference Numbers" is superfluous and required for deletion is understood by Applicant as determination by the Examiner that all such reference elements depicted in the drawings are adequately described in the detailed description of Applicant's specification without such list.

Applicant has amended the claims to obviate the objections to claims 2-4, 6-8 and 10-12.

Claims 1-14 stand rejected under 35 USC § 112 as failing to comply with the enablement requirement. Applicant respectfully traverses the Examiner's rejection that those of ordinary skill in the art are not reasonably apprised of Applicant's claimed invention.

With respect to amended claims 1-3, 5-8 and 10-14, independent claim 1 has been amended to include a voltage source, i.e. power source, which the Examiner acknowledges is described in the specification. *See e.g., paragraphs [0054], [0063] and [0064].*

With respect to the distinction between a power source and the fibers and composite material constituting a shock-wave generating part 12 to generate shock waves, Applicant clearly describes at paragraphs of [0013]-[0016] and [0056] that shock waves are generated by stretching of the piezoelectric fibers in part 12 as electricity is supplied from a connected voltage source that may be electrically connected in a number of operative embodiments. *See also paragraphs [0054], [0063] and [0064].* Applicant respectfully requests withdrawal of the rejection under 35 USC §112, as those of ordinary skill in the art are apprised by Applicant's description of voltage generator, i.e. power source, operatively coupled to the piezoelectric fibers as at least described, and application of electricity causes the fibers to stretch to generate shock waves from the shock wave generating part 12.

In view of the amendment to independent claim 1, and supported by the specification at least as set forth, Applicant requests withdrawal of the Examiner's additional rejection under 35 USC § 112 based on a gap between elements of the invention.

Claims 1-14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,869,189 to Hagood, IV et al. ("Hagood"). Applicant respectfully traverses the rejection as Hagood fails to disclose and provides no predictable guidance for the elements of a shock wave generating apparatus of amended claims 1-3, 5-8 and 10-14 including a composite comprising piezoelectric fibers in a composite material in combination with a voltage source and "a coupling membrane defining a volume filled with a shock wave transmission medium between the piezoelectric fibers and the coupling membrane."

As Hagood does not relate to shock wave generation there is no express or inherent teaching of the claim 1 limitations for piezoelectric fibers in a composite as part of shock wave generating apparatus and in combination with a propagation medium provided between piezoelectric fibers and a coupling membrane. Further, those skilled in the art are provided no predictable guidance from Hagood's limited disclosure of piezoelectric composites for applications such as "aircraft wings", *see Hagood '189 at col. 1, line 62 (cf. paragraph [0012] of Applicant's specification)*, to arrive at the claimed invention and elements for shock wave generation.

As to dependent claims 2, 12 and 13 Hagood discloses no piezoelectric fibers in combination with a shock wave propagation medium and coupling membrane, wherein said fibers are provided lengthwise between respective electrical terminals. Further Hagood fails to disclose at least one electrical connection to the respective terminals of the combination of shock wave producing elements (claim 13) and one electrical connection to the terminals is to an electrically conductive carrier of the combination of shock wave producing elements (claim 14).


As to dependent claims 3, 5-8, 10 and 11, Hagood discloses no carrier of a shock wave generating apparatus coupled to a module of piezoelectric integrated in a composite material and in combination with a shock wave propagation medium and coupling membrane, and wherein the fibers are provided lengthwise between respective electrical terminals. Further Hagood fails to disclose a module with piezoelectric fibers having a common electrical contact in said combination of shock wave producing elements (claim 5); a plurality of modules arranged in said combination of shock wave producing elements (claim 6), a plurality of modules controllable as a group in said combination of shock wave producing elements (claim 7), a plurality of modules interconnected as individually controllable in said combination of shock

wave producing elements (claim 8), a carrier in said combination of shock wave producing elements including a geometry selected from the group consisting of planar, spherical and cylindrical (claim 10) and an electrically conductive carrier in said combination of shock wave producing elements (claim 11).

For the foregoing reasons amended claims 1-3, 5-8 and 10-14 are neither anticipated or obvious in view of the cited reference, and withdrawal of the rejection under 35 USC § 102 is requested. Applicant respectfully requests that a timely Notice of Allowance be issued in this application.

Applicant requests that any extensions and/or additional fees unaccounted for now or at anytime during prosecution of this application be charged to Deposit Account No. 50-0206, Order No. 69643.001500. Any overpayment can be credited to Deposit Account No. 50-0206, Order No. 69643.001500.

Respectfully submitted,


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